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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,128	12/09/2005	Takeshi Oka	450100-05109	2855

7590 09/06/2011
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EXAMINER

RAHMAN, MOHAMMAD N

ART UNIT	PAPER NUMBER
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2161

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09/06/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/560,128	OKA ET AL.	
	Examiner	Art Unit	
	MOHAMMAD RAHMAN	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-10 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-10 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Detailed Action

1. This communication is responsive to the request for (RCE) filed on 07/12/2011.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/12/2011 has been entered.

Status of the claims

3. **Claims 1 and 8-10** are amended. **Claims 1- 10** are presented for examination.

Response to Arguments

- 5.. Applicant's arguments, see Remarks filed 06/03/2011, with respect to the rejection(s) of **claim(s) 1-10** under 35 USC 102(e) have been fully considered and are moot in view of new grounds of rejection made in view of Yoshida et al. (U.S. Patent No. 6,883,111 B2).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-10** are rejected under 35 U.S.C. 103 (a) as being unpatentable over Wilkinson (US Publication No. 2002/0164149), in view of Sugimura et al. (US Publication No. 2004/ 0042370) and further in view of Yoshida et al. (U.S. Patent No. 6,883,111 B2)...

As to claim 1, Wilkinson teaches, **a file generation apparatus for generating a file of first data to be recorded on a recording medium, the file generation apparatus comprising:**

- **“first generation means for generating second data to be arranged at the beginning of the file”** see at Fig. 1 and Para, [0013] and [0047], (The file comprises a file header, a file body and a file footer. The body contains the "essence" that is, in this example, video and / audio essence data.);
- **“second generation means for generating third data to be arranged at the end of the file”** see at Fig. 1 and Para. [0047] and [0054], (The MXF file is terminated by a file footer); and

- **“Wherein the first data is converted from a standard AV multiplexing file that has frame-based video and audio data the first data being either video data or audio data organized according to an edit unit** (at Para. [0063], (Metadata may also comprise data relating to edits in the material. It may comprise instructions defining simple editing and other processes to be performed on the material), **and wherein the stuffing data has a KLV structure”** at Para. [0020], (The packets include integer numbers of whole KLV encoded items containing the data of the structure where a value field V contains the data, a length field indicates the length of the value field and a key field indicates the type of packet. According to the spec. picture item to have the fixed length, a filler as stuffing data also uses the KLV structure and is arranged after the video data of the picture item. So it is described that packets include integer numbers of whole KLV encoded items containing the data of the structure where a value field V contains the data, a length field indicates the length of the value field.).

Wilkinson does not teach, **“third generation means for generating fourth data which allows the data amount of the first, second, or third data to be an integral multiple of a unit of reading or writing to the recording medium by adding the fourth data to the first data, the second data, or the third data; wherein the second data and third data have a format that is the same as the format of the standard AV multiplexing file”**;

However, Sugimura teaches, “**memory means for storing data** (at Para. [0033], (The control microcomputer confirms an amount of the image/sound data stored in the buffer memory)); **third generation means for generating fourth data which allows the data amount of the first, second, or third data to be an integral multiple of a unit of reading or writing to the recording medium** (at Para. [0061] and [0062], (the control microcomputer records the blocks (a data amount of one block is equal to an integral multiple of an ECC block) sequentially from the outside (a sector of a larger sector number) to inside (a sector of a smaller sector number))) **by adding the fourth data to the first data, the second data, or the third data**” Para. [0020], [0026] and [0061], (Management information manages a recorded position, data amount, file identifier (file name), file generation time, or file type of data 104, 105 recorded on the optical disk.);

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Sugimura into the recording method, reproducing apparatus, recording medium of Wilkinson, because third generation means for generating fourth data which allows the data amount of the first, second, or third data to be an integral multiple of a unit of reading or writing to the recording medium by adding the fourth data to the first data, the second data, or the third data would provide “recording data and management information that manages the data onto a recording medium”.

Wilkinson / Sugimura does not teach, “**wherein the second data and third data have a format that is the same as the format of the standard AV multiplexing file**”;

Yoshida teaches, **“wherein the second data and third data have a format that is the same as the format of the standard AV multiplexing file”** see Fig. 2 and col. 3, lines 46 - 67 and col. 4, lines 1- 21.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Yoshida into the Data recording method and data recording apparatus of Wilkinson / Sugimura, because the second data and third data have a format that is the same as the format of the standard AV multiplexing file would provide “comparing data size of user data under management of management data with data size of user data stored in recording medium”.

Note that claims 8 and 9 recite the corresponding limitations as set forth in claim 1 above, thus rejected accordingly.

As to claim 2, Wilkinson/ Sugimura teaches, “the file generation apparatus according to claim 1, wherein the first generation means generates the second data, i.e., a header of the file” see Wilkinson, at Para. [0013].

As to claim 3, Wilkinson/ Sugimura teaches, “the file generation apparatus according to claim 1, wherein the first generation means further comprises format conversion means for converting the first data into a KLV (Key, Length, Value) structure; and wherein the first generation means generates the second data composed of the file's header, and a

Art Unit: 2161

key and a length arranged between the header and the first data” see at Fig.1 and Para. [0013] and [0020].

As to claim 4, Wilkinson/ Sugimura teaches, “the file generation apparatus according to claim 1, wherein the third generation means generates the fourth data by making an addition to each of N-1 portions of the first data toward the beginning out of the first data divided into N portions, where N is an integer, so that the data amount of each of the first data divided into N-1 portions becomes an integral multiple of a physical unit area of the recording medium and the overall data amount of the first data becomes an integral multiple of the unit of reading and writing on the recording medium” see at Fig. 2 and 3 and Para. [0064], [0066] and [0067], (the Header Metadata of the preamble comprises 16 bytes of Header Metadata Universal Label (UL), followed by a length byte followed by KLV encoded metadata sets (sets 1 to n) which constitute the data of the value field (V). So it is explained that the length N then the data amount of each of the first data divided into N-1 portions.)

As to claim 5, Wilkinson/ Sugimura teaches, “the file generation apparatus according to claim 1, wherein the third generation means generates the fourth data for the first data divided into units corresponding to specified reproduction times with video data and audio data for a plurality of channels multiplexed in accordance with the divided units so that the data amount for each of divided units of the first data corresponds to an integral multiple of the unit of reading and writing on the recording medium” see at paragraphs [0064], [0133] and [0147].

As to claim 6, Wilkinson/ Sugimura teaches, “the file generation apparatus according to claim 5, wherein the third generation means generates the fourth data so that the data amount totaling partition data for separating divided portions of the first data from each other, metadata contained in each of divided portions of the first data, and the video data corresponds to an integral multiple of the unit of reading and writing on the recording medium” at paragraphs [0058], [0081] and [0132].

As to claim 7, Wilkinson/ Sugimura teaches, “the file generation apparatus according to claim 5, wherein the third generation means generates the fourth data so that the data amount of each of divided portions of the audio data contained in each of divided portions of the first data corresponds to an integral fraction of the unit of reading and writing on the recording medium and the overall data amount of the audio data corresponds to an integral multiple of the unit of reading and writing on the recording medium” see at Fig. 3 and paragraphs [0058], [0081] and [0132].

As to claim 10, Wilkinson teaches, a recording medium to record a file of first data, wherein first additional data is added to record the first data whose data amount corresponds to an integral multiple of a unit of reading or writing to the recording medium so that a boundary of the first data matches a boundary of the unit” see at Fig. 1 and Para, [0013] and [0047], (The file comprises a file header, a file body and a file footer. The body contains the "essence" that is, in this example, video and / audio essence data.);

- “wherein second data is arranged at the beginning of the file and is attached with second additional data to have the data amount corresponding to an integral multiple of the unit so that a boundary of the second data matches a boundary of the unit” see at Fig. 1 and Para. [0047] and [0054], (The MXF file is terminated by a file footer); and
- “Wherein the first data is converted from a standard AV multiplexing file that has frame-based video and audio data the first data being either video data or audio data organized according to an edit unit (at Para. [0063], (Metadata may also comprise data relating to edits in the material. It may comprise instructions defining simple editing and other processes to be performed on the material), and wherein the stuffing data has a KLV structure” at Para. [0020], (The packets include integer numbers of whole KLV encoded items containing the data of the structure where a value field V contains the data, a length field indicates the length of the value field and a key field indicates the type of packet).

Wilkinson does not teach, “third generation means for generating fourth data which allows the data amount of the first, second, or third data to be an integral multiple of a unit of reading or writing to the recording medium by adding the fourth data to the first data, the second data, or the third data; wherein the second data and third data have a format that is the same as the format of the standard AV multiplexing file”;

However, Sugimura teaches, **“third generation means for generating fourth data which allows the data amount of the first, second, or third data to be an**

Art Unit: 2161

integral multiple of a unit of reading or writing to the recording medium (at Para. [0061] and [0062], (the control microcomputer records the blocks (a data amount of one block is equal to an integral multiple of an ECC block) sequentially from the outside (a sector of a larger sector number) to inside (a sector of a smaller sector number))) **by adding the fourth data to the first data, the second data, or the third data**" Para. [0020], [0026] and [0061], (Management information manages a recorded position, data amount, file identifier (file name), file generation time, or file type of data 104, 105 recorded on the optical disk.);

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Wilkinson / Sugimura does not teach, "**wherein the second data and third data have a format that is the same as the format of the standard AV multiplexing file**";

Yoshida teaches, "**wherein the second data and third data have a format that is the same as the format of the standard AV multiplexing file**" see Fig. 2 and col. 3, lines 46 - 67 and col. 4, lines 1-21.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Yoshida into the Data recording method and data recording apparatus of Wilkinson/ Sugimura, because the second data and third data have a format that is the same as the format of the standard AV multiplexing file would provide “comparing data size of user data under management of management data with data size of user data stored in recording medium”.

Conclusion

8. Examiner’s Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which indicate(s) the structure relied on for proper interpretation and also to verify and ascertain in the metes and bounds of the claimed invention.

The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant’s disclosure.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad N. Rahman whose telephone number is 571-270-1631. The examiner can normally be reached on 7:30am - 5:00 pm, Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mofiz Apu M can be reached on 572-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mohammad N Rahman/
Examiner, Art Unit 2161
Date: 08/29/2011

/Etienne P LeRoux/

Primary Examiner, Art Unit 2161